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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,140

07/17/2006

Yuuichiro Aso

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7590

08/21/2009

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EXAMINER

HAN, QI

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

08/21/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,140	<b>Applicant(s)</b> ASO, YUUCHIRO	
	<b>Examiner</b> QI HAN	<b>Art Unit</b> 2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/17/2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***U.S.C. National Stage Application***

1. Acknowledgement is made of the indication that the present application is filed under 35 U.S.C. 371, of the indication that the required form PCT/DO/ED/903 is present, and of the use of transmittal form PCT/DO/EO/1390. Thus, the present application is being treated as a filing under 35 U.S.C. 371.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

3. The references listed in the Information Disclosure Statement submitted on 07/17/2006 have been considered by the examiner (see attached PTO-1449).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claim 6, the claimed limitation of “...**implicit punctuation symbols** in the text information of the first language” is indefinite because it is unclear what the claimed “implicit punctuation symbols” really are. It is also noted that the claimed “implicit punctuation symbols” are not commonly accepted/used terms in the art and are not specifically defined/described in the specification.

Regarding claim 7, the claimed limitation of “...**explicit punctuation symbols** in the text information of the first language” is indefinite because it is unclear what the claimed “explicit punctuation symbols” really are. It is also noted that the claimed “explicit punctuation symbols” are not commonly accepted/used terms in the art and are not specifically defined/described in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by APPLEBY et al. (US 6,463,404 B1).

As per **claim 1**, APPLEBY discloses ‘translation system’ (abstract), comprising:  
a punctuation symbol detection unit detecting whether a predetermined punctuation symbol exists or not in text information of a first language, (col. 5, lines 58-61, ‘text (of a first language) is received from the client terminal’, ‘detecting ...punctuation’); and

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a translation unit (translator) translating the text information of the first language into text information of a second language which is different from the first language, when the punctuation symbol is detected by said punctuation symbol detection unit (Figs. 3-5 and col. 3, lines 55-67; col. 5, lines 58-61).

As per **claim 2** (depending on claim 1), the rejection is based on the same reason(s) described for claim 1, because it also reads on the limitation(s) of claim 1 (also see col. 4, lines 11-12).

As per **claim 3** (depending on claim 1), APPLEBY further discloses “a transmission unit transmitting the translated text information of the second language” (col. 3, lines 58-61, ‘to produce a translation of the text (in second language) for supply (transmitting) back to the user’).

As per **claim 4** (depending on claim 1), APPLEBY further discloses “a reception unit (the client terminal) receiving the text information of the second language transmitted from said transmission unit” (Figs. 1-3 and col. 3, lines 58-61; also see col. 12, lines 26-30).

As per **claim 5** (depending on claim 1), APPLEBY further discloses “a voice recognition unit converting voice information of the first language into the text information of the first language” (col. 14, lines 14-17, ‘a speech recognition (inherently converting voice information to text) front-end (unit)’).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over APPLEBY in view of TANG et al. (US 2002/0069055 A1) hereinafter referenced as TANG.

As per **claim 6** (depending on claim 5), even though APPLEBY discloses speech/voice recognition (see above), as best understood in view of the rejection under 35 USC 112 2<sup>nd</sup> (as stated above), APPLEBY does not expressly disclose converting “explicit punctuation in the voice information of the first language into [implicit] punctuation symbols in the text information of the first language”. However, the feature is well known in the art as evidenced by TANG who discloses ‘apparatus and method for automatically generating punctuation marks in continuous speech recognition’ (title and abstract), comprising ‘continuous speech recognition’ requiring ‘punctuation marks being spoken during dictation’, and sample a speech in that ‘the punctuation marks have to be spoken out (read on explicit punctuation in the voice information)’ and then ‘recognized as corresponding punctuation marks (i.e. converting the spoken punctuations into punctuation symbols in text)’ (p(paragraph)5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APPLEBY by providing a speech recognition system having a mechanism to recognize spoken punctuation marks (in text) and converting them into corresponding recognized punctuation marks (in text, i.e. symbols), as taught by TANG, for the purpose (motivation) of providing a speech recognition system with ability of recognizing/generating punctuation marks (TANG: p1).

As per **claim 7** (depending on claim 5), even though APPLEBY discloses speech/voice recognition (see above), as best understood in view of the rejection under 35 USC 112 2<sup>nd</sup> (as

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stated above), APPLEBY does not expressly disclose converting “implicit punctuation in the voice information of the first language into explicit punctuation symbols in the text information of the first language”. However, the feature is well known in the art as evidenced by TANG who discloses ‘apparatus and method for automatically generating punctuation marks in continuous speech recognition’ (title and abstract), comprising ‘continuous speech recognition... automatically generating punctuation marks’ without requiring ‘punctuation marks being spoken out in speech’ (corresponding to implicit punctuation in the voice information) (p7), ‘generating punctuation marks...by finding most likely pseudo punctuation marks at every location of pseudo noises ...based on a language model containing pseudo punctuation marks’ (p10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APPLEBY by providing a speech recognition system having a mechanism to automatically generating punctuation marks (in text, i.e. symbols) without speaking out punctuation marks (in speech), as taught by TANG, for the purpose (motivation) of providing a speech recognition with ability of automatically generating punctuation marks but not affecting use’s normal/natural speech (TANG: p6-p7).

As per **claim 8** (depending on claim 5), APPLEBY in view of TANG further discloses “a reception unit receiving the voice information of the first language (speech)” (TANG: Fig.1 and p3, ‘collects (receives) user’s speech’; it is noted that the speech recognition disclosed by APPLEBY necessarily/inherently includes receiving a speech).

As per **claim 9** (depending on claim 5), APPLEBY in view of TANG further discloses “a voice input unit inputting the voice information of the first language (speech)” (TANG: Fig.1

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and p3, 'collects (inputs) user's speech'; it is noted that the speech recognition disclosed by APPLEBY necessarily/inherently includes receiving a speech).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over APPLEBY in view of TANG as applied to claim 9, and further in view of HUTCHISON (US 2002/0156626 A1).

As per **claim 10** (depending on claim 9), APPLEBY in view of TANG does not expressly disclose converting "a transmission unit transmitting the voice information of the first language which is inputted at said voice input unit; and a reception unit receiving the text information of the first language which is transmitted at said transmission unit". However, the feature is well known in the art as evidenced by HUTCHISON who discloses 'speech recognition system' (title), comprising 'distributed voice processing system' for 'voice (and or speech) recognition services' (p24 and p26), 'receiving speech signal into a front-end processor' and 'the network-attached server' to 'perform the speech recognition' (claim 1), including 'transmitting the speech signal (voice information in the first language) to the network-attached server' (claim 5) and 'returning (receiving) a response ...comprising text (text information) corresponding to the speech signal (in the first language)' (claim 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APPLEBY in view of TANG by providing distributed speech recognition services having a mechanism to transmit speech to a speech server and return the corresponding text to frond-end user, as taught by HUTCHISON, for the purpose (motivation) of performing voice and speech recognition over a



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distributed new work and/or providing speech recognition system with increased accuracy with reduced cost (HUTCHISON: p2 and p15).

8. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over APPLEBY in view of CRUICKSHANK (US 6,818,468 B1).

As per **claim 11** (depending on claim 1), APPLEBY does not expressly disclose converting “a voice synthesis unit converting the text information of the second language into voice information”. However, the feature is well known in the art as evidenced by CRUICKSHANK who discloses ‘transcription and/or translation services’ (abstract) that ‘may be distributed...using a client-server style architecture’ (col. 2, lines 32-35), comprising “speech to text recognition’, translating the text ‘into a participant’s desired language (second language)’, and ‘text to speech synthesizing’ to ‘generate an audio (speech) signal (in second language) corresponding to the transcribed and translated generated text (in second language)’ (col. 2, lines 20-31), wherein the ‘audio signal (in second language) may then be transmitted to a participant (recipient)’ over ‘PSTN’ or ‘data network’ (Figs. 8-9 and col. 12, lines 28-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APPLEBY by providing distributed speech services/facilities using client-server style architecture having text-to-speech synthesizing and audio (synthesized speech) transmitting (and/or receiving) features, as taught by CRUICKSHANK, for the purpose (motivation) of providing audio translation services to generate an audio signal from the translated and transcribed text (CRUICKSHANK: abstract).

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As per **claim 12** (depending on claim 11), the rejection is based on the same reason(s) described for claim 11, because it also reads on the limitation(s) of claim 12.

***Conclusion***

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Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to QI HAN whose telephone number is (571)272-7604. The examiner can normally be reached on M-TH:9:00-19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QH/qh

August 19, 2009

/Qi Han/

Primary Examiner, Art Unit 2626